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WATER FOR UTAH

A Review of Duties and Funding Programs of the Division and Board of Water Resources

January 2016

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BOARD OF WATER RESOURCES

LOWER COLORADO RIVER DISTRICT

Beaver, Garfield, Iron,
Washington, and Kane Counties

JAMES A. LEMMON – CHAIR

233 West 1300 South
Hurricane, UT 84737
Phone: 435-773-7012 (cell)
jlemmon@BuySouthernUtah.com

PROVO RIVER DISTRICT

Juab, Utah, and
Wasatch Counties

STEVE FARRELL – VICE CHAIR

325 West 500 South
Midway, UT 84049
Phone: 801-541-2974 (cell)
Sbfarrell325@msn.com

BEAR RIVER DISTRICT

Box Elder, Cache, and
Rich Counties

CHARLES HOLMGREN

P.O. Box 187
Bear River City, UT 84301
Phone: 435-279-3303 (cell)
cwholm@frontiernet.net

UPPER COLORADO RIVER DISTRICT

Carbon, Emery, Grand,
and San Juan Counties

NORMAN L. JOHNSON

438 South 100 West
Blanding, UT 84511
Phone: 435-678-2552 (home)
435-459-1821 (cell)
njohnson1947@gmail.com

SEVIER RIVER DISTRICT

Millard, Sanpete,
Sevier, Piute, and
Wayne Counties

H. BLAINE IPSON

1064 South 1950 West
Delta, UT 84624
Phone: 435-864-3120 (home)
435-864-8692 (cell)
Blaine.ipson@ipsc.com

SALT LAKE DISTRICT

Salt Lake and Tooele
Counties

J. STEWART PAULICK

914 Vine Street
Tooele, UT 84074
Phone: 435-830-4196 (cell)
jspaulick@msn.com

WEBER RIVER DISTRICT

Weber, Davis, Morgan,
and Summit Counties

DAVID S. HUMPHREYS

2828 North 975 East
North Ogden, UT 84414
Phone: 801-814-1022 (cell)
humphreyshouse@msn.com

GREEN RIVER DISTRICT

Daggett, Duchesne,
and Uintah Counties

N. GAWAIN SNOW

3700 South Hwy 149
Box 146
Jensen, UT 84035
Phone: 435-790-1780 (cell)
gsnow@uwcd.org

ERIC L. MILLIS - DIRECTOR

Division of Water Resources
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Salt Lake City, UT 84114-6201
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BOARD/DIVISION OF WATER RESOURCES

Briefing Paper

The Division of Water Resources (Division) is one of seven agencies of the Utah Department of Natural Resources and is the water resources planning and development lead for the State of Utah. The Board of Water Resources (Board) is the policy-making body of the Division.

Legislative Authority

- Protect Utah's rights to interstate waters.
- Provide comprehensive water planning.
- Manage Utah's water resource project construction programs.

Mission

- **The Division of Water Resources plans, conserves, develops, and protects Utah's water resources.**

Goals

- Implement water education/conservation programs that encourage wise municipal, industrial, agricultural, and environmental water use.
- Defend and protect Utah's rights to develop and use its entitlement to interstate streams.
- Continue state water planning activities to identify future water needs and assist water entities in meeting those needs.
- Provide technical and financial assistance to encourage the highest beneficial uses of water consistent with economic, social, and environmental consideration.
- Maintain accurate and current water supply and land use data for each hydrologic basin in the state.
- Promote cloud seeding operational projects and research.
- Provide funding for the upgrade of dams to maintain safe reservoir storage and meet current Dam Safety Standards with available funding from the Legislature.



INTERSTATE STREAMS AND STATE AND FEDERAL RELATIONS

Geography, history and national politics have a profound influence on water management in Utah. Drainage basins covering more than half the state are associated with interstate streams. The water resources of these areas are governed by state water law, as well as interstate compacts. In addition, over two-thirds of the lands of the state are owned and administered by the federal government and federal laws and regulations associated with these lands present unique problems to state water planners and administrators. Increased environmental awareness has generated federal legislation that significantly constrains the formulation and implementation of water-related activities.

The Board, with the approval of the department executive director and the governor, designates a representative of the state of Utah in all interstate conferences and meetings between the state of Utah and one or more basin states held to enter into compacts to divide interstate waters or to discuss interstate streams issues. Eric Millis, the Division of Water Resources (Division) Director serves as Utah's Interstate Streams Commissioner, the governor's representative on Colorado River management issues and is Utah's representative on the Upper Colorado River Commission, and Bear River Commission. In addition the Director serves on the Western States Water Council, Colorado River Basin Salinity Control Forum and Advisory Council, and the Glen Canyon Adaptive Management Work Group.

Because control of much of Utah's water resources is affected by actions of other states and federal agencies, active participation on selected interstate and state/federal bodies is essential to protect Utah's interests.

Upper Colorado River Commission

The states of the Upper Colorado River Basin share approximately six million acre-feet of the waters of the Colorado River. Of the allocation, 50,000 acre-feet of consumptive use is apportioned to Arizona; of the remainder, 51.75% is apportioned to Colorado, 11.25% to New Mexico, 14% to Wyoming, and 23% to Utah. Utah's annual entitlement is estimated to be 1.37 million acre-feet.

The Upper Colorado River Commission was created by the Upper Colorado River Compact of 1948. The Commission has a federal chairman (appointed by the president) and one member from each of the four Upper Division States - Colorado, New Mexico, Utah and Wyoming. Eric Millis is Utah's commissioner and Dallin Jensen has just retired as the alternate commissioner. In addition, the Board appointed the following advisers to the commission: Gene Shawcroft, general manager of the Central Utah Water Conservancy District; Kent Jones, State Engineer; Robert King, of the Division; Gawain Snow, general manager of the Uintah Water Conservancy District; and Norman Johnson, Assistant Attorney General.



agricultural and municipal and industrial uses in the Basin. The Salinity Control Forum was created in 1972 with the concurrence of the Governor and the water development and water quality agencies of the seven states. Although it has no specific legislative mandate, the Forum has been very successful as a means of obtaining comity and strong congressional support for salinity control projects.

It is important to the proper function of the Forum that members are professionals from the water development and water quality agencies of state government. Leah Ann Lamb (Division of Water Quality), Gawain Snow (Uintah Water Conservancy District), and Eric Millis are Utah's members of the Forum.

In 1974 Congress passed the Colorado River Salinity Control Project Act, which authorizes funding for salinity control projects. The act also provides for the appointment of three members to an advisory council by each governor of the seven Colorado River basin states. The Council is responsible for advising the Secretary of Interior, the Secretary of Agriculture and the Administrator of the Environmental Protection Agency on salinity matters. The Council meets annually with representatives of Interior and Agriculture departments and the Environmental Protection Agency. Leah Ann Lamb and Eric Millis serve on this council at the pleasure of the governor.

Governor's Representative on Colorado River Management

Following the 1983 flooding on the Colorado River, the Secretary of the Interior invited each of the seven governors to name a personal representative to negotiate management policies on operations of the reservoir system on the river. Meetings are held frequently between the seven representatives and staff of the Bureau of Reclamation to discuss Colorado Basin issues. Eric Millis is the Governor's representative.

Glen Canyon Adaptive Management Work Group

Created by the Grand Canyon Protection Act of 1992, the Glen Canyon Adaptive Management Program includes a federal advisory committee to make recommendations to the Secretary of the Interior on the operations of Glen Canyon Dam to enhance and protect the downstream environment in the Grand Canyon, while also maintaining the purposes for which Glen Canyon Dam was built. Eric Millis is Utah's representative on the Federal Advisory Committee and Robert King of the Division serves as an alternate on the committee as well as on the technical committee. They help protect Utah's interest in its Colorado River water supply, recreation on Lake Powell, environmental enhancement, and power generation capacity at Glen Canyon Dam.



The Division published water-related land use inventories for two basins and four special study reports: "Utah's M&I Water Conservation Plan – Investing in the Future", plus the Jordan River Basin and the Utah Lake Basin land use inventory summaries. It also prepared a Public Review Draft of the Uinta Basin State Water Plan.

Conservation and Education

The Water Conservation and Education programs are focused on activities and programs to help Utahns reduce the per capita municipal and industrial water use of Utah residents. The division is committed to expand efforts in water conservation and education by:

- a. Providing materials and teacher training in public schools; sponsoring the Utah Waters Van program and the Water Education Poster Contest and Banquet.
- b. Be the lead agency for the Governor's Water Conservation Team
- c. Working with local water agencies to develop and implement water conservation programs, including education of the general public as to how to use Utah's water wisely;
- d. Promoting modification of laws, ordinances and regulations to promote efficient water use.

The Division participated in the 'Envision Utah – Your Utah, Your Future' planning process.

Cloud Seeding

Cloud seeding has long been recognized by water professionals as a feasible means to augment the natural water supply. Conditions are especially favorable in Utah where topography, climate and water storage reservoirs make winter snowpack enhancement cost-effective.

Utah enacted weather modification legislation in 1973, and an operational cloud seeding program was funded in 1976. The field program, which usually extends from November to April, is funded jointly by the state and local water interests. Statistical analysis of the cloud seeding program since its beginning shows an average increase in precipitation of 8% to 20% in seeded areas at a cost of about \$2.27 per acre-foot for the additional water.

WATER DEVELOPMENT PROGRAMS

In 1909 the Utah State Legislature approved an "Act to Provide for a Utah State Conservation Commission" to prevent waste of the natural resources in Utah. On March 17, 1921 the Legislature created the Utah Water Storage Commission. Its principal powers and duties were "to make investigations, looking to a full and proper development and utilization of the state's water supply." That organization continued until March 31, 1941, when the Legislature abolished the Commission



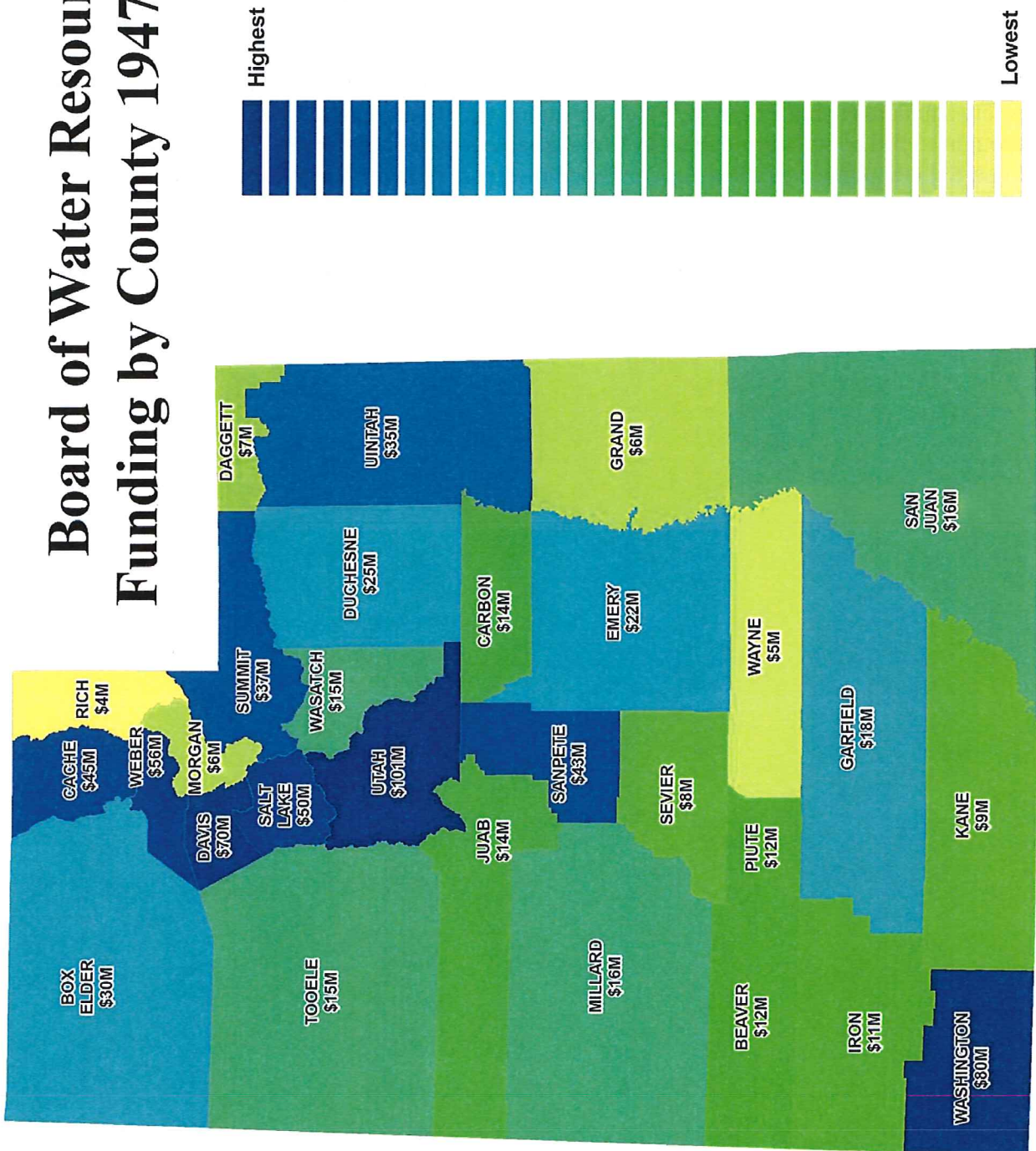
BOARD OF WATER RESOURCES

SUMMARY OF PROJECT TYPES

1947- FY 2015

Projects	Project Type	Board Funds
38	Dam Safety Construction Projects	\$ 78,661,478
137	Dams, Dam Repair, Enlargement	126,820,457
60	Diversion Dams	7,462,764
63	Wells	3,834,089
156	Canals and Canal Linings	31,424,880
119	Pipelines	110,425,270
237	Sprinkler Systems	90,627,175
100	Dual Water Systems	121,504,788
455	Municipal and Domestic Systems	201,735,733
65	Miscellaneous	14,302,027
1430	TOTAL	\$ 786,798,662

Board of Water Resources Funding by County 1947-2015





DAM SAFETY UPGRADE PROJECTS WITH BOARD GRANTS

As of FY 2015

#	DAM	USE	OWNER/ORGANIZATION	STATUS
1	ADAMS	IRR	KAYS CREEK IRR. CO.	COMPLY
2	DRY CANYON	FLOOD	LINDON CITY	COMPLY
3	ENTERPRISE (UPPER)	IRR	ENTERPRISE RES & CNL CO.	COMPLY
4	FARMINGTON POND	FLOOD	DAVIS COUNTY	COMPLY
5	FORSYTH	IRR	FREMONT IRR. CO.	COMPLY
6	GUNNISON	IRR	GUNNISON IRR. CO.	COMPLY
7	HOLMES	IRR	HOLMES CREEK IRR. CO.	COMPLY
8	HUNTINGTON	IRR	HUNTINGTON-CLEVELAND IRR. CO.	COMPLY
9	IVINS BENCH	IRR	IVINS IRR. CO.	COMPLY
10	LOGAN 1ST	HYDRO	UTAH STATE UNIVERSITY	COMPLY
11	LONG PARK	IRR	SHEEP CREEK IRR. CO.	COMPLY
12	LOYD'S LAKE	MULTI	SAN JUAN WCD	COMPLY
13	MANDERFIELD	IRR	MANDERFIELD IRR. CO.	COMPLY
14	MILL HOLLOW	REC	WILDLIFE RESOURCES	COMPLY
15	MONA	IRR	CURRENT CREEK IRR. CO.	COMPLY
16	MT DELL	M&I	SALT LAKE CITY	COMPLY
17	OTTER CREEK	IRR	OTTER CREEK RES. CO.	COMPLY
18	PANGUITCH LAKE DAM	IRR	WEST PANGUITCH IRR. & RES. CO.	COMPLY
19	PIUTE	IRR	PIUTE RES. & IRR. CO.	COMPLY
20	PORCUPINE	IRR	PORCUPINE RES. CO.	COMPLY
21	RECAPTURE	MULTI	SJWCD	COMPLY
22	RED CREEK (IRON CO)	IRR	PARAGOONAH CANAL CO.	COMPLY
23	ROCKY FORD (BEAVER)	IRR	ROCKY FORD IRR. CO.	COMPLY
24	SEVIER BRIDGE	IRR	CONS. SEVIER BRIDGE CO.	COMPLY
25	SMITH & MOREHOUSE	MULTI	WEBER BASIN WCD	COMPLY
26	THISTLE	FLOOD	DEPARTMENT OF NATURAL RESOURCES	COMPLY
27	THREE CREEKS (BEAVER)	IRR	KENTS LAKE IRR. CO.	COMPLY
28	TWIN LAKES	IRR	SALT LAKE CITY	COMPLY
29	WIDE HOLLOW	IRR	NEW ESCALANTE IRR. CO.	COMPLY
30	BAKER	IRR	BAKER RES. CO.	PARTIAL COMPLY
31	DMAD	IRR	DMAD CO.	PARTIAL COMPLY
32	ENTERPRISE (LOWER)	IRR	ENTERPRISE RES. & CANAL CO.	PARTIAL COMPLY
33	FAIRVIEW LAKE	IRR	COTTONWOOD GOOSEBERRY IRR. CO.	PARTIAL COMPLY
34	MILL MEADOW	IRR	FREMONT IRR. CO.	PARTIAL COMPLY
35	MILLER FLAT	IRR	HUNTINGTON-CLEVELAND IRR. CO.	PARTIAL COMPLY
36	KAYSVILLE	IRR	KAYSVILLE IRR. CO.	CONSTRUCTION FY'15
37	RED CREEK	IRR	RED CREEK IRR. CO.	CONSTRUCTION FY'15
38	CLIFF LAKE	IRR	OURAY PARK IRR. CO.	CONSTRUCTION FY'15
39	SILVER LAKE FLAT	IRR	NORTH UTAH COUNTY WCD	CONSTRUCTION FY'15
40	MILLSITE	IRR	FERRON RES. & CANAL CO	DESIGN
41	WARNER DRAW	FLOOD	WASHINGTON FLOOD CONTROL AUTH	DESIGN
42	GYPSUM WASH	FLOOD	WASHINGTON FLOOD CONTROL AUTH	DESIGN
43	TIBBLE FORK	MULTI	NORTH UTAH COUNTY WCD	DESIGN



BOARD OF WATER RESOURCES

CITIES WATER LOAN FUND

Interim Funding Status FY 2016
As of December 3, 2015

Funds Available for Projects This FY	\$ 10,203,000
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Bonds Closed This FY

1 Weber-Box Elder Conservation District	E326	\$ 1,700,000	
Total Bonds Closed			\$ 1,700,000
Funds Balance			\$ 8,503,000

Projects with Funds Committed

1 None		\$ -	
Total Funds Committed			\$ -
Funds Balance			\$ 8,503,000

Projects Authorized

2 Duchesne County WCD	E334	\$ 3,000,000	
3 Herriman City	E344	4,930,000	
Total Funds Authorized			\$ 7,930,000
Remaining Funds Available			# \$ 573,000

End of year balance if all listed projects were fully paid



BOARD OF WATER RESOURCES

Additional Future Funding Needs

Interim Funding Status FY 2016 As of December 3, 2015

Projects	No.	Fund	County	Est. Board Cost	Total Cost
1 Corinne City	E216	C&D	Box Elder	\$80,000	\$ 100,000
2 South Willard Water Co	E317	C&D	Box Elder	1,700,000	2,000,000
3 Ferron Canal & Res Co	E320	C&D	Emery	2,720,000	3,200,000
4 Parowan City (Bond Ins Grant)	E121	C&D	Iron	34,000	2,034,000
5 East Juab County WCD	E071	C&D	Juab	425,000	500,000
6 Kane County WCD	D828	C&D	Kane	1,500,000	2,000,000
7 Sanpete WCD (Narrows Dam)	D377	C&D	Rich	29,325,000	34,500,000
8 Duchesne County Water Conservancy District	E358	C&D	Sanpete	99,000	116,000
9 Fountain Green Co-op Well	E328	RCF	Sanpete	255,000	300,000
10 Fountain Green Irr Co (Flow Augment)	E186	RCF	Sanpete	75,000	100,000
11 La Sal Irrigation Co	E354	C&D	Sanpete	1,530,000	1,800,000
12 Moon Lake Water Users Association	E362	C&D	Sanpete	1,382,000	3,250,000
13 New Fayette Irrigation Co	E360	C&D	Sanpete	850,000	1,000,000
14 Uintah and Whiterocks River Commission	E359	C&D	Sanpete	47,000	55,000
15 Wellsville-Mendon Conservation District	E364	C&D	Sanpete	680,000	800,000
16 Weber Basin WCD	E312	C&D	Summit	85,000,000	100,000,000
17 Ashley Upper Irr Co	E373	C&D	Uintah	5,255,000	13,942,000
18 Highline Canal Co	E372	C&D	Uintah	3,087,000	13,942,000
19 Mosby Irr Co	E374	RCF	Uintah	331,000	4,379,000
20 Whiterocks Irr Co	E375	C&D	Uintah	1,245,000	4,379,000
21 Fremont Irr Co	E131	C&D	Wayne	1,500,000	2,000,000
22 Co-op Farm Irrigation Co	E340	RCF	Weber	159,000	187,000
23 Hooper Irr Co (Press Irr, Ph 3+)	E060R3+	C&D	Weber	11,033,000	12,980,000
24 Washington County Flood Control Authority	C049	RCF	Weber	970,000	3,077,000
25 Washington County Flood Control Authority	C050	RCF	Weber	582,000	1,847,000
26 Washington County Flood Control Authority	C051	RCF	Weber	473,000	1,500,000
27 Weber Basin WCD (Secondary, Ph 3-5)	E029R3+	C&D	Weber	21,639,000	25,816,000
Total				\$171,976,000	\$235,804,000



BOARD OF WATER RESOURCES
Projects Funded in FY 2015

Sponsor			Board Funds
Revolving Construction Fund			
None			\$ -
RCF Subtotal	<u>0</u>		\$ -
Revolving Construction Fund (Dam Safety)			
Manderfield Irr and Res Co (additional funds)	C043	**Loan	\$ 8,000
Manderfield Irr and Res Co (additional funds)	C043	**Grant	72,000
Red Creek Irrigation Co (additional funds)	C045	**Loan	347,000
Red Creek Irrigation Co	C045	**Grant	3,122,000
Dam Safety Subtotal	<u>4</u>		\$ 3,549,000
RCF TOTAL	<u>4</u>		\$ 3,549,000
Cities Water Loan Fund			
None			\$ -
CWL TOTAL	<u>0</u>		\$ -
Conservation & Development Fund			
Cottonwood Creek Consolidated Irr Co	E325		\$ 1,340,000
Cub River Irrigation Co	E339		3,825,000
Dry Gulch Irr. Co (Class D, E - additional funds)	E285		40,000
Dry Gulch Irrigation Co (Class E, F, K2)	E357		1,037,000
Gunnison Irrigation Co	E350		540,000
Kays Creek Irrigation Co (additional funds)	E268		582,000
McArthur Frandsen Ditch Co	E348		723,000
North Summit Pressurized Irrigation Co	E297		3,910,000
Parowan City	E319		3,464,000
Saratoga Springs City	L574		53,000
Settlement Canyon Irrigation Co (Phase 1)	E240		891,400
Weber Basin WCD (Phase 4)	E225		10,000,000
Westfield Irrigation Co	E335		1,254,000
North Summit Pressurized Irr Co (add'l funds)	E297		345,000
Newton Water Users Assoc	E280		3,060,000
C&D Subtotal	<u>15</u>		\$ 31,064,400
C&D Lake Powell/Bear River Studies			
Lake Powell Pipeline	<u>RT300</u>		\$ 4,886,284
Lake Powell/Bear River Subtotal	<u>1</u>		\$ 4,886,284
C&D TOTAL	<u>16</u>		\$ 35,950,684
Contracts	20	GRAND TOTAL	\$ 39,499,684

BOARD OF WATER RESOURCES

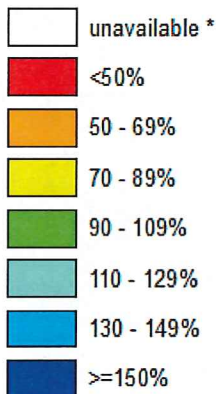
Summary of Funds Invested in Water Development from 1947 through FY 2015

COUNTY	C&D			CWL			RCF			Total Sum of BOARD \$	Total Sum of TOTAL \$	Total PROJECTS
	BOARD \$	TOTAL \$	PROJECTS	BOARD \$	TOTAL \$	PROJECTS	BOARD \$	TOTAL \$	PROJECTS			
BEAVER	\$ 2,079,000	\$ 3,425,461	3	\$ 690,000	\$ 827,000	3	\$ 9,537,285	\$ 11,483,515	25	\$ 12,306,285	\$ 15,735,976	31
BOX ELDER	\$ 19,313,413	\$ 22,336,005	9	\$ 6,510,500	\$ 12,552,734	21	\$ 4,643,397	\$ 6,505,909	43	\$ 30,467,310	\$ 41,394,648	73
CACHE	\$ 22,464,454	\$ 47,988,689	24	\$ 7,472,985	\$ 15,916,061	23	\$ 15,551,722	\$ 27,076,353	44	\$ 45,489,161	\$ 90,981,103	91
CARBON	\$ 8,935,000	\$ 25,299,828	8	\$ 4,273,000	\$ 11,552,885	9	\$ 881,182	\$ 1,533,083	14	\$ 14,089,182	\$ 38,385,596	31
DAGGETT	\$ -	\$ -	0	\$ 471,300	\$ 893,300	3	\$ 6,944,329	\$ 14,271,954	7	\$ 7,415,629	\$ 15,165,254	10
DAVIS	\$ 52,948,277	\$ 95,673,525	28	\$ 7,293,105	\$ 31,446,362	20	\$ 10,098,935	\$ 11,952,772	20	\$ 70,340,317	\$ 199,072,660	68
DUCHESNE	\$ 11,355,448	\$ 24,140,600	6	\$ 4,533,000	\$ 15,967,507	13	\$ 8,828,350	\$ 13,037,199	20	\$ 24,716,798	\$ 53,145,306	39
EMERY	\$ 10,772,146	\$ 72,847,482	7	\$ 1,556,000	\$ 3,964,110	6	\$ 9,756,133	\$ 33,808,225	14	\$ 22,084,278	\$ 110,619,817	27
GARFIELD	\$ 4,676,869	\$ 5,527,558	7	\$ 1,162,000	\$ 2,613,533	6	\$ 12,363,349	\$ 19,712,351	30	\$ 18,222,218	\$ 27,853,442	43
GRAND	\$ 4,996,016	\$ 5,011,289	5	\$ 817,240	\$ 2,031,655	2	\$ 357,594	\$ 594,740	4	\$ 6,170,850	\$ 7,637,684	11
IRON	\$ 6,108,552	\$ 9,131,064	5	\$ 2,350,317	\$ 7,374,040	10	\$ 2,599,596	\$ 3,730,701	19	\$ 11,058,465	\$ 20,235,805	34
JUAB	\$ 5,048,718	\$ 13,944,160	4	\$ 654,000	\$ 1,451,863	3	\$ 8,660,126	\$ 10,388,537	32	\$ 14,362,844	\$ 25,784,560	39
KANE	\$ 6,059,793	\$ 15,289,952	3	\$ 1,828,000	\$ 2,318,493	5	\$ 1,490,434	\$ 2,437,560	10	\$ 9,378,227	\$ 20,046,004	18
MILLARD	\$ -	\$ -	0	\$ 2,295,300	\$ 7,313,125	13	\$ 13,808,523	\$ 17,378,218	111	\$ 16,103,823	\$ 24,691,343	124
MORGAN	\$ 4,446,579	\$ 5,107,920	3	\$ 300,000	\$ 656,000	1	\$ 1,463,625	\$ 2,330,488	15	\$ 6,210,205	\$ 8,094,408	19
PIUTE	\$ -	\$ -	0	\$ -	\$ -	0	\$ 12,108,420	\$ 13,575,638	16	\$ 12,108,420	\$ 13,575,638	16
RICH	\$ 580,000	\$ 811,044	2	\$ 217,000	\$ 847,864	3	\$ 3,438,834	\$ 4,615,382	11	\$ 4,235,834	\$ 6,274,290	16
SALT LAKE	\$ 39,809,500	\$ 475,230,719	25	\$ 3,691,549	\$ 33,376,982	6	\$ 6,119,911	\$ 15,952,257	32	\$ 49,620,960	\$ 524,559,959	63
SAN JUAN	\$ 11,093,842	\$ 16,668,330	3	\$ 552,000	\$ 1,572,522	3	\$ 4,702,084	\$ 7,914,054	12	\$ 16,347,926	\$ 26,154,906	18
SANPETE	\$ 17,734,964	\$ 29,208,235	22	\$ 5,245,700	\$ 16,842,291	15	\$ 20,033,082	\$ 29,239,384	93	\$ 43,013,745	\$ 75,289,910	130
SEVIER	\$ 2,523,000	\$ 4,781,500	4	\$ 1,393,700	\$ 2,361,731	8	\$ 4,111,449	\$ 6,614,397	36	\$ 8,028,149	\$ 13,757,628	48
SUMMIT	\$ 19,809,108	\$ 71,425,784	11	\$ 12,016,703	\$ 17,422,458	16	\$ 5,514,015	\$ 12,702,129	28	\$ 37,339,825	\$ 101,550,372	55
TOOELE	\$ 11,540,260	\$ 21,649,014	5	\$ 433,000	\$ 1,621,000	3	\$ 3,057,565	\$ 5,066,144	28	\$ 15,030,825	\$ 28,336,158	36
UINTAH	\$ 22,190,989	\$ 41,852,086	8	\$ 1,454,000	\$ 4,435,816	4	\$ 11,490,042	\$ 16,564,305	21	\$ 35,135,031	\$ 62,852,207	33
UTAH	\$ 90,528,791	\$ 288,687,620	27	\$ 5,093,334	\$ 44,341,671	17	\$ 5,675,445	\$ 9,639,142	74	\$ 101,297,570	\$ 342,668,433	118
WASATCH	\$ 11,204,199	\$ 14,039,903	6	\$ -	\$ -	0	\$ 3,338,895	\$ 4,668,123	23	\$ 14,543,094	\$ 18,708,026	29
WASHINGTON	\$ 63,695,004	\$ 162,587,329	30	\$ 4,686,500	\$ 14,622,446	17	\$ 11,798,569	\$ 16,069,868	51	\$ 80,180,074	\$ 193,279,643	98
WAYNE	\$ 310,000	\$ 390,000	1	\$ 80,000	\$ 390,000	1	\$ 4,859,190	\$ 8,280,752	39	\$ 5,249,190	\$ 9,060,752	41
WEBER	\$ 47,611,085	\$ 117,028,100	28	\$ 2,876,000	\$ 6,731,990	8	\$ 5,765,342	\$ 7,752,893	35	\$ 56,252,427	\$ 131,512,983	71
Grand Total	\$ 497,835,006	\$ 1,590,083,198	284	\$ 79,946,233	\$ 261,445,238	239	\$ 209,017,423	\$ 334,896,073	907	\$ 786,798,662	\$ 2,186,424,509	1,430

Utah SNOTEL Current Snow Water Equivalent (SWE) % of Normal

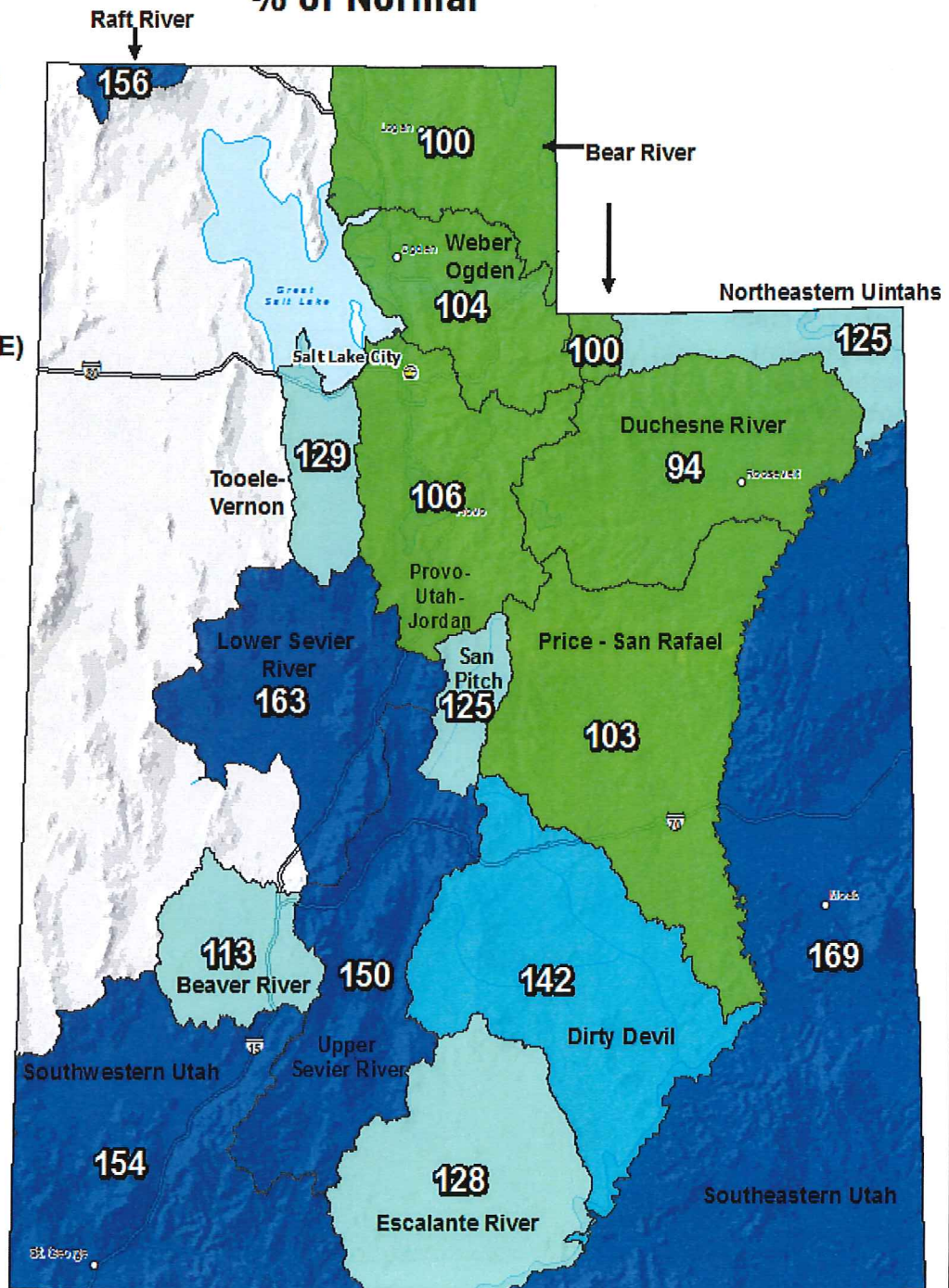
Feb 07, 2016

**Snow Water
Equivalent (SWE)
Basin-wide
Percent of
1981-2010
Median**



* Data unavailable at time of posting or measurement is not representative at this time of year

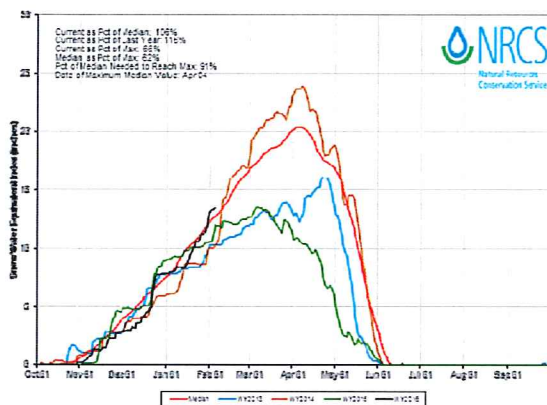
*Provisional Data
Subject to Revision*



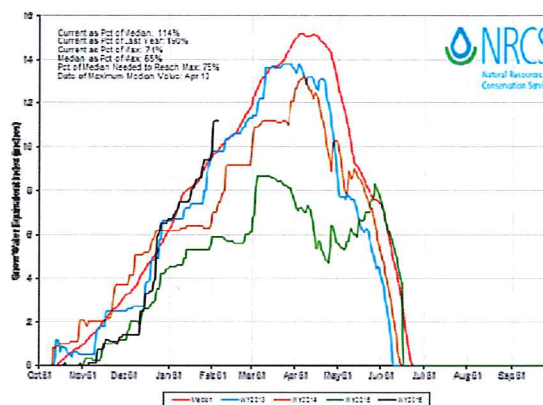
The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

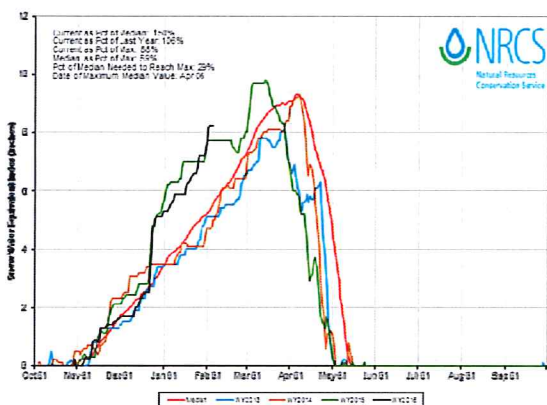
Bear River Time Series Snowpack Summary
Based on Provisional SNOTEL data as of Feb 4, 2016



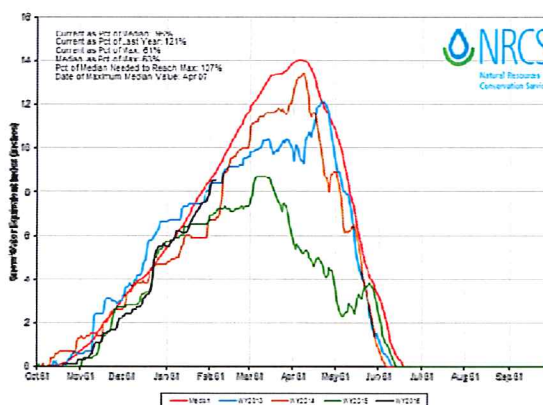
Beaver River Time Series Snowpack Summary
Based on Provisional SNOTEL data as of Feb 4, 2016



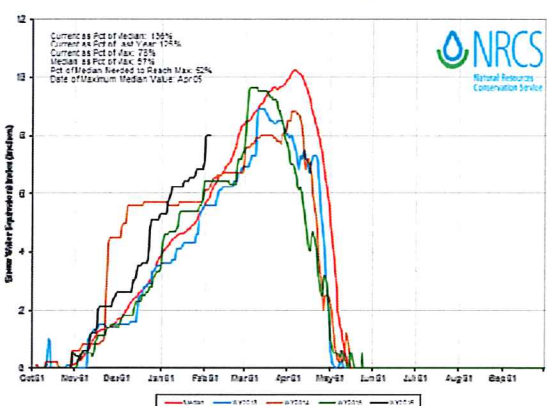
Dirty Devil Time Series Snowpack Summary
Based on Provisional SNOTEL data as of Feb 4, 2016



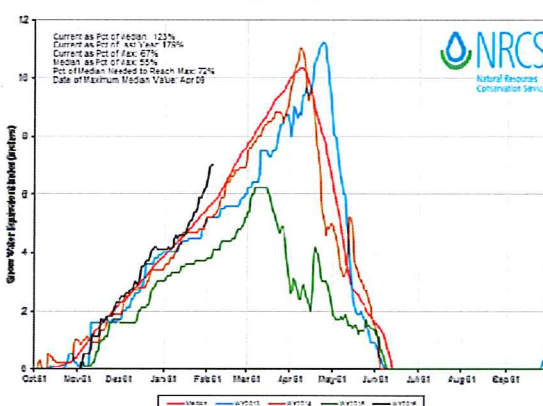
Duchesne River Time Series Snowpack Summary
Based on Provisional SNOTEL data as of Feb 4, 2016



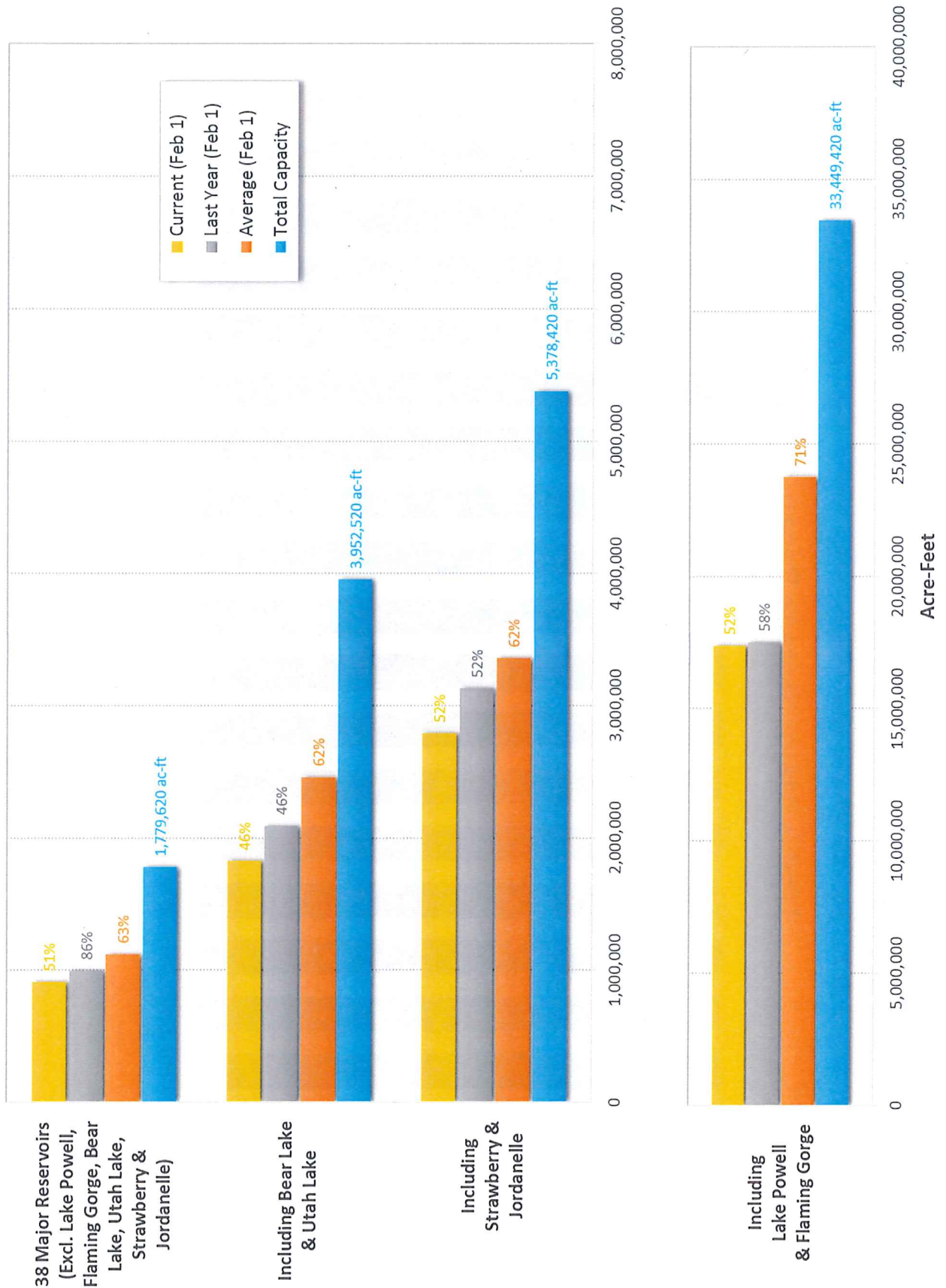
Escalante River Time Series Snowpack Summary
Based on Provisional SNOTEL data as of Feb 4, 2016



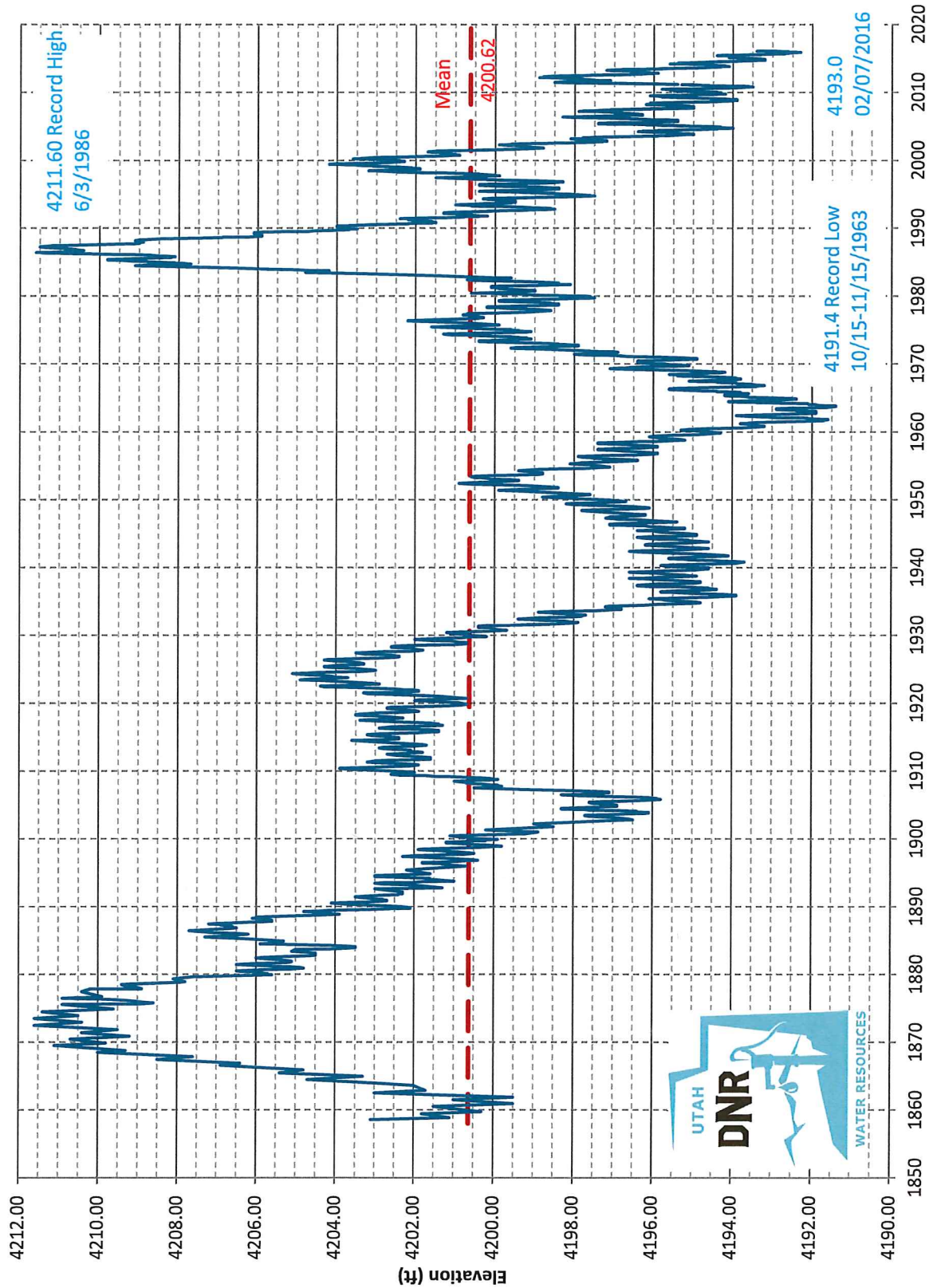
Green River Time Series Snowpack Summary
Based on Provisional SNOTEL data as of Feb 4, 2016



Statewide Reservoir Storage (Feb 1)



Great Salt Lake South Arm Elevations

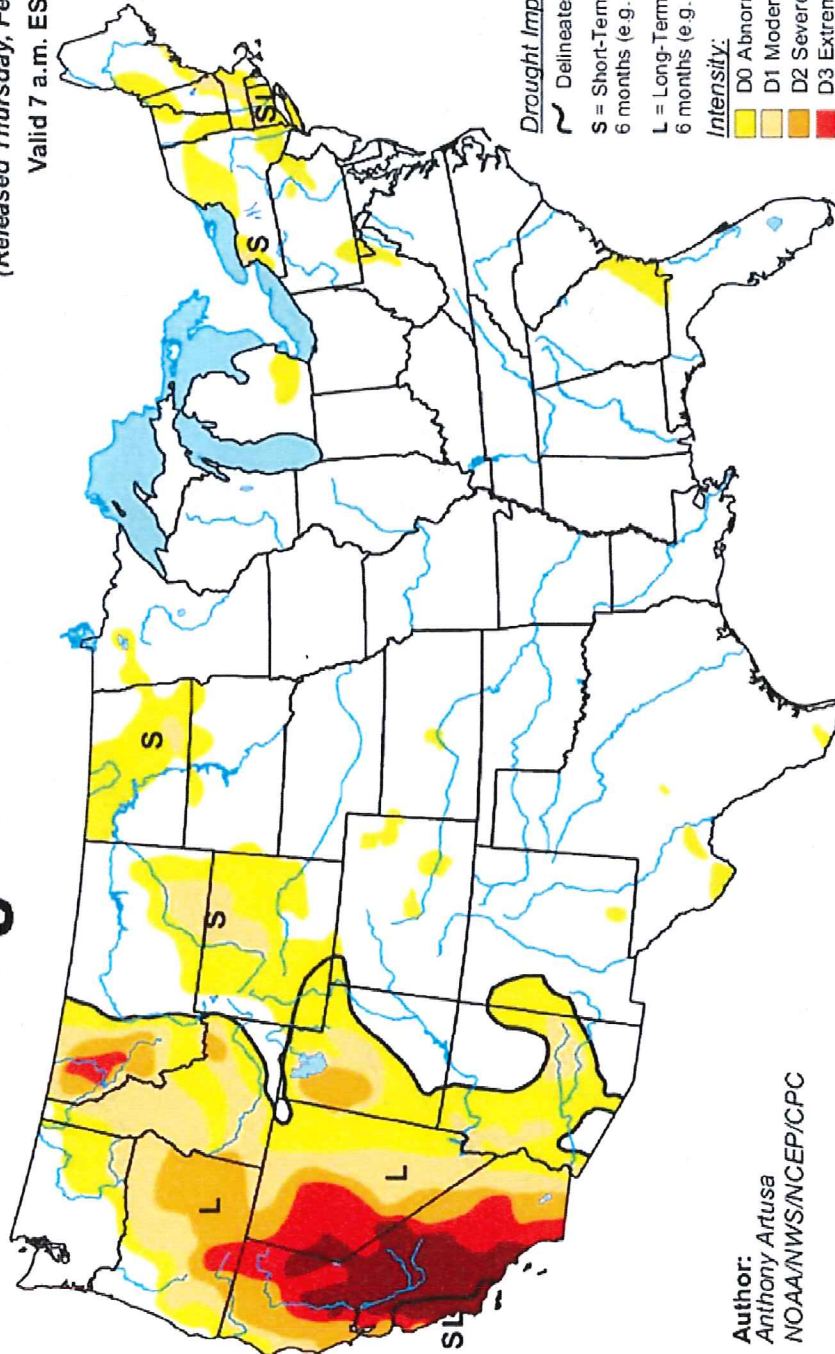


U.S. Drought Monitor

February 2, 2016

(Released Thursday, Feb. 4, 2016)

Valid 7 a.m. EST



Author:
Anthony Artusa
NOAA/NWS/NCEP/CPC

Drought Impact Types:

- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

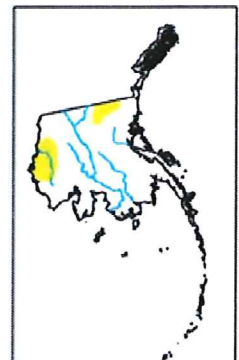
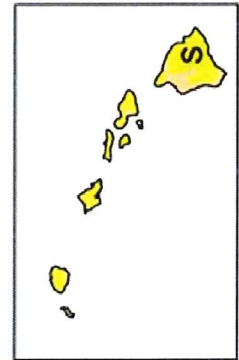
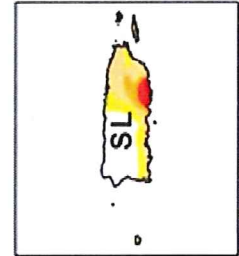
Intensity:

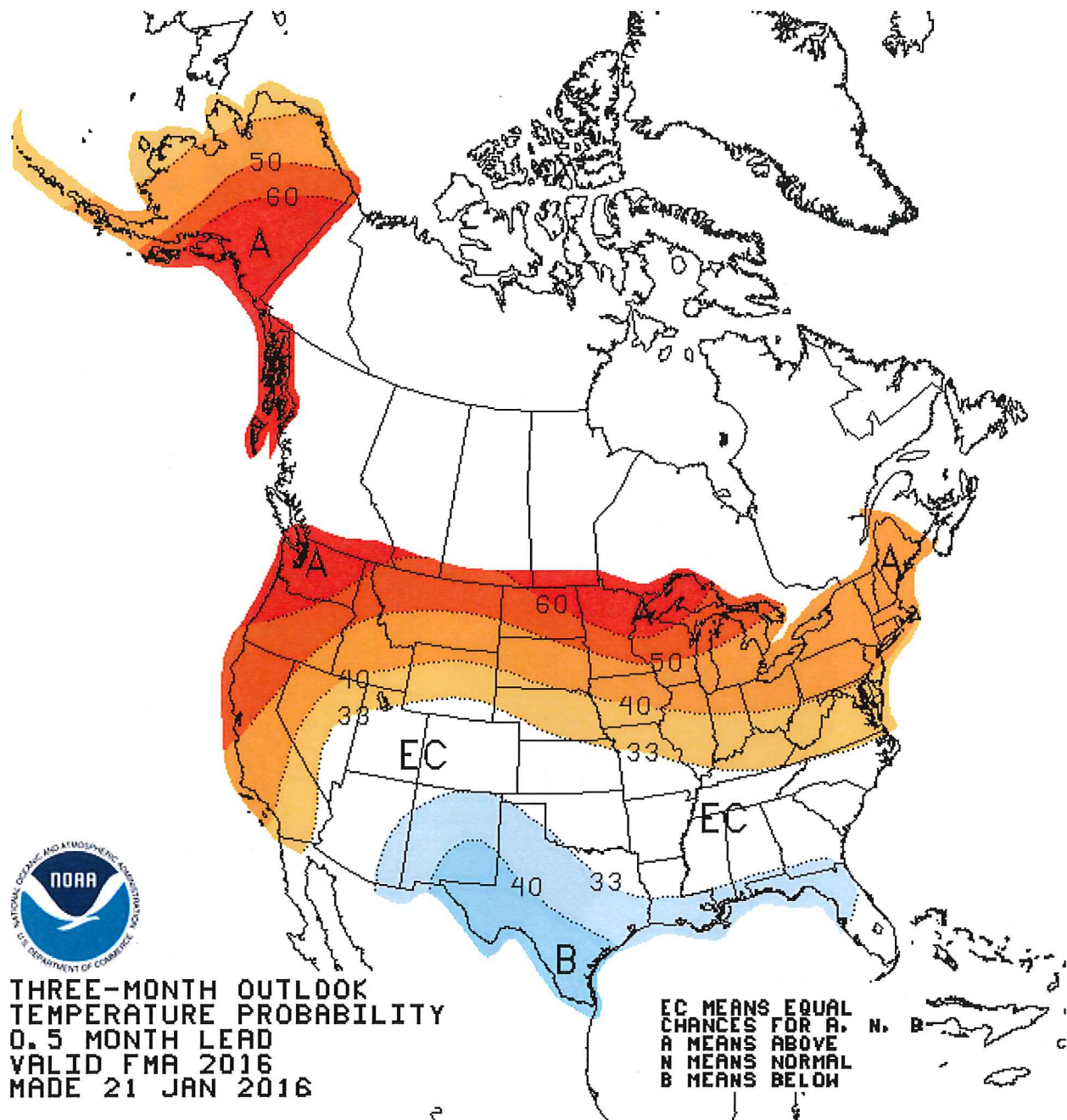
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



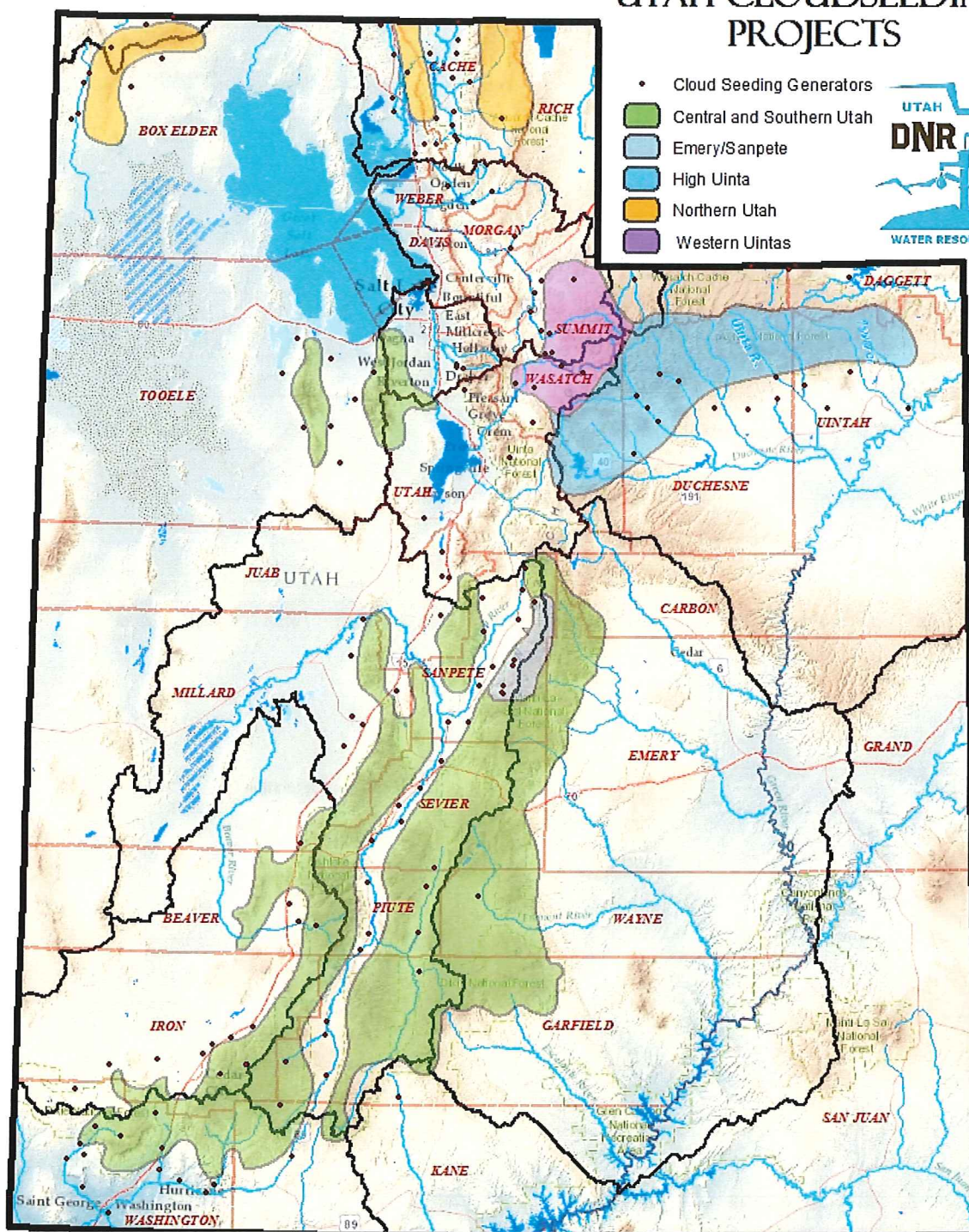
<http://droughtmonitor.unl.edu/>





Cloud Seeding Target Areas

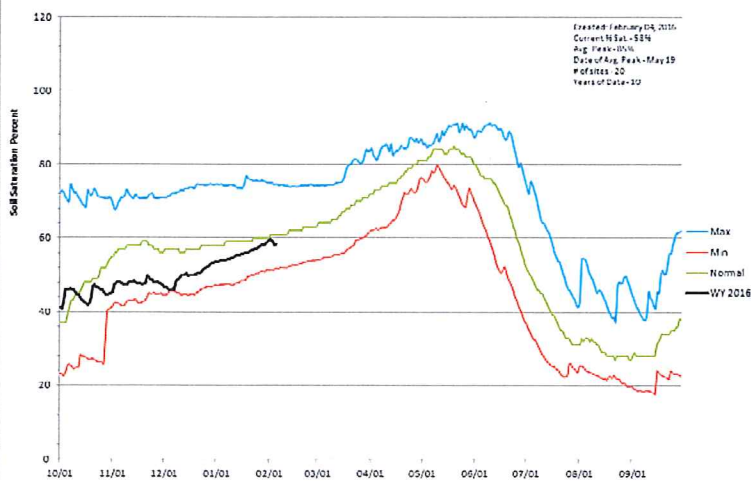
UTAH CLOUDSEEDING PROJECTS



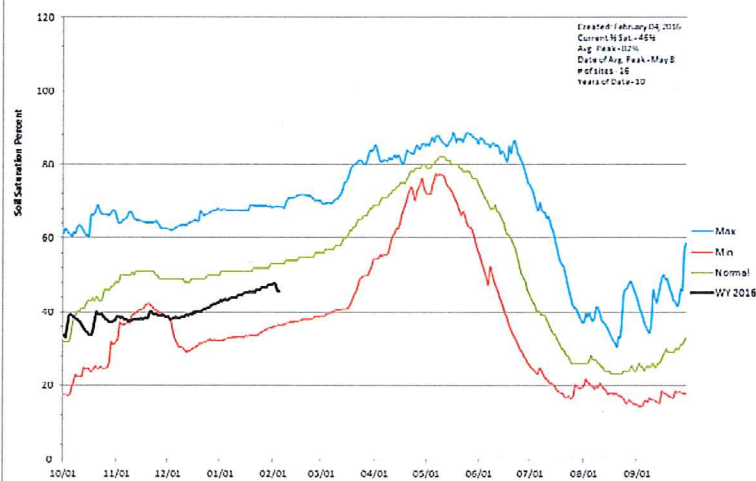
Sources: Esri, DeLorme, USGS, NPS



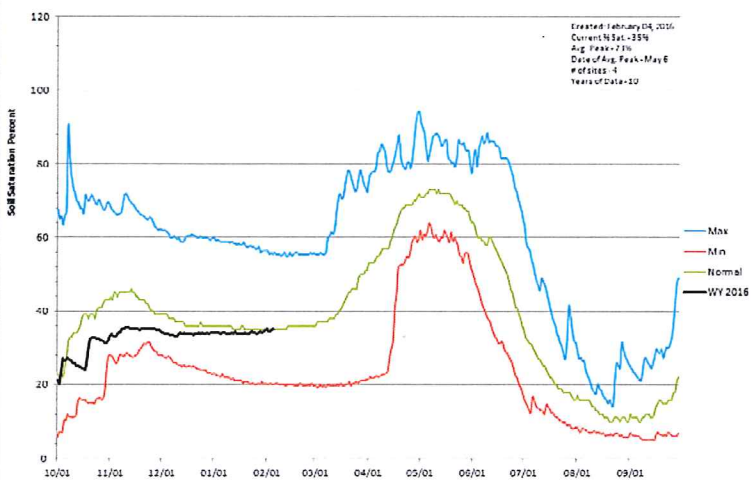
Weber Ogden Rivers - Soil Saturation



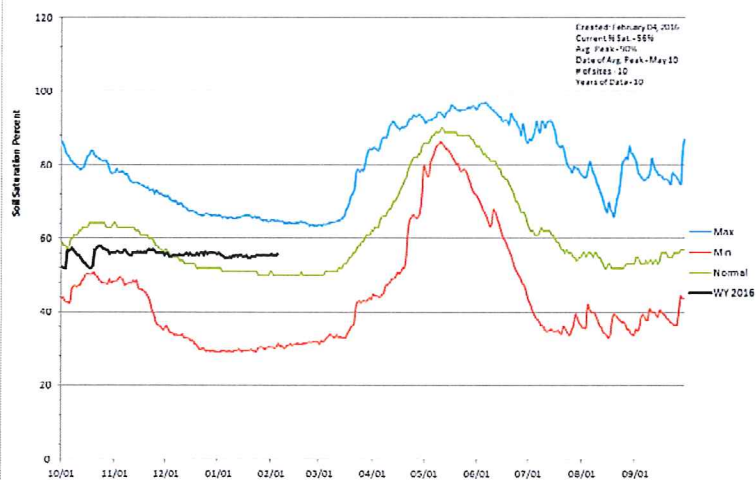
Provo R Utah Lake Jordan R - Soil Saturation



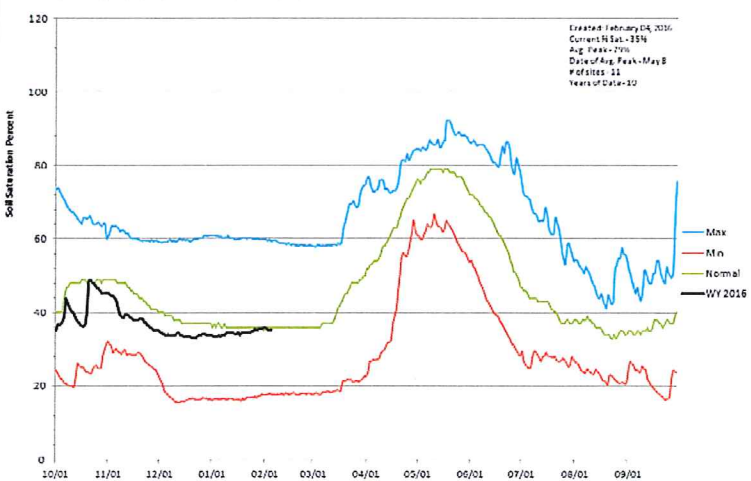
Tooele Valley Vernon Creek - Soil Saturation



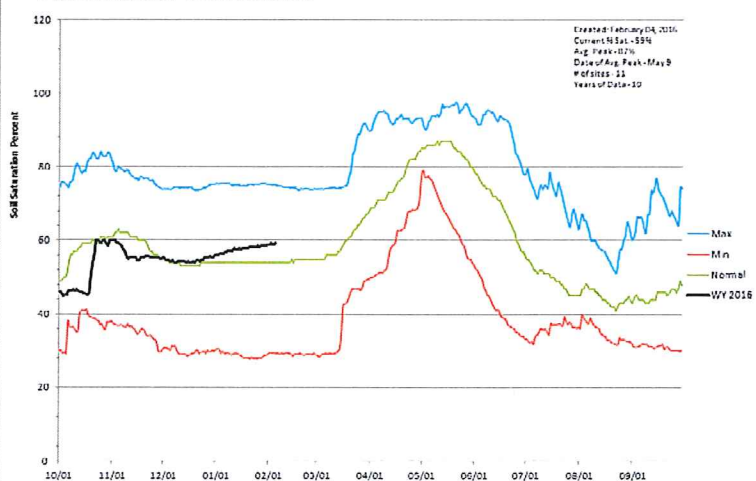
Northeastern Uintahs - Soil Saturation



Duchesne River - Soil Saturation

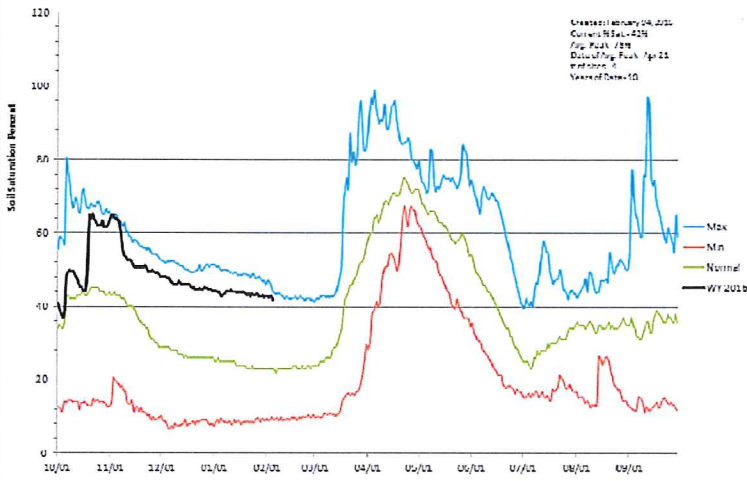


Price San Rafael - Soil Saturation





Escalante River - Soil Saturation



Southwestern Utah - Soil Saturation

